Remarks/Arguments begin on page 8 of this paper.

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of metal fusion bonding components together, said method comprising:

providing a flexible articulate tubular device separate from welding apparatus for producing metal fusion for bonding the components, the articulate tubular device having an inlet at one end of the tubular device for receiving a supply of gaseous flux and an other end of the tubular device for discharge of gaseous flux, the flexible articulate tubular device further comprising a plurality of pivot rings and wherein one of the plurality of pivot rings is a terminal pivot ring, a control module comprising a motion controller comprising electronics and an articulation drive device operatively connected to the plurality of pivot rings;

articulating said flexible articulate tubular device to direct said terminal pivot ring along a target weld path to be progressively formed between said components, and wherein said articulating said flexible articulate tubular device comprises communicating motion control commands from the motion controller to the articulating drive device causing the articulating drive device to pivot ~~pivoting~~ at least one of the plurality of pivot rings; and

supplying a gaseous flux along said flexible articulate tubular device, out said other end of the tubular device, and toward said target weld path as it is progressively formed.

2. (Previously Presented) The method of metal fusion bonding as recited in claim 1, further comprising maintaining the position of said terminal pivot ring of said flexible articulate tubular device in accordance with the position of a leading edge of a weld bead along said target weld path.

3. (Canceled)

4. (Previously Presented) The method of metal fusion bonding as recited in claim 1, wherein said articulating is conducted in accordance with said target weld path having an irregular path.

5. (Previously Presented) The method of metal fusion bonding as recited in claim 1, wherein said supplying involves extending a gas feed line through said flexible articulate tubular device.

6. (Previously Presented) The method of metal fusion bonding as recited in claim 1, further comprising initially positioning said flexible articulate tubular device in relation to said components.

7. (Previously Presented) The method of metal fusion bonding as recited in claim 6 wherein the terminal pivot ring further comprises an optic element, and further comprising:

conveying visual signals from said optic element of said flexible articulate tubular device; and

translating and articulating said flexible articulate tubular device in response to said visual signals.

8. (Previously Presented) The method of metal fusion bonding as recited in claim 7, further comprising further positioning said flexible articulate tubular device so as to trace said target weld path.

9. (Previously Presented) The method of metal fusion bonding as recited in claim 1 and wherein the terminal pivot ring comprises a thermal responsive device, further positioning the flexible articulate tubular device so as to trace the target weld path comprising measuring temperature, using the thermal responsive device, at two or more locations at said terminal pivot ring of said flexible articulate tubular device.

10. (Previously Presented) The method of metal fusion bonding as recited in claim 9, wherein said further positioning further comprises articulating said flexible articulate tubular device in response to said measuring temperature.

11. (Original) The method of metal fusion bonding as recited in claim 1, wherein said components comprise at least a pair of tubular components.

12. (Previously Presented) The method of metal fusion bonding as recited in claim 11, wherein said articulating comprises articulating said flexible articulate tubular device within said at least a pair of tubular components.

13. (Currently Amended) A method of metal fusion bonding an assembly of components, the assembly having an upper side for engagement by welding apparatus and an underside comprising:

providing a flexible articulate tubular device separate from welding apparatus for producing metal fusion for bonding the components, the articulate tubular device having an inlet at one end of the tubular device for receiving a supply of gaseous flux and having an other end of the tubular device for discharge of gaseous flux, the flexible articulate tubular device further comprising a plurality of pivot rings and wherein one of the pivot rings is a terminal pivot ring, a control module comprising a motion controller comprising electronics, and an articulation drive device connected to the plurality of pivot rings by a plurality of wires;

positioning said flexible articulate tubular device at an underside of said components in correspondence with a target weld path to be progressively formed between said components;

articulating said flexible articulate tubular device to direct said terminal pivot ring along said target weld path as it is progressively formed, and wherein said articulating said flexible articulating tubular device comprising communicating motion control commands from the motion controller to the articulation drive device causing the articulation drive device to apply a tensile force to one or more of the wires to pivot ~~pivoting~~ at least one of said plurality of pivot rings; and

supplying a gaseous flux through said flexible articulate tubular device out of said other end of the tubular device and toward said target weld path.

14. (Previously Presented) The method as recited in claim 13, wherein said components comprise a plurality of tubular structures and the flexible articulate tubular device is positioned and articulated inside a tubular structure to supply gaseous flux to said target weld path.

15. (Previously Presented) The method as recited in claim 14 and wherein the terminal pivot ring further comprises an optic element, wherein said positioning comprises:

conveying visual signals from said optic element of said flexible articulate tubular device; and

translating and articulating said flexible articulate tubular device in response to said visual signals.

16. (Previously Presented) The method as recited in claim 13 and wherein the terminal pivot ring further comprises a thermal response device, further comprising:

measuring temperature, using the thermal response device, at two or more locations at said terminal pivot ring of said flexible articulate tubular device; and

articulating said flexible articulate tubular device in response to said measuring temperature.

17-22. (Canceled)

23. (New) A method as set forth in claim 1 wherein the flexible articulate tubular device further comprises a protective sheath over the plurality of pivot rings.

24. (New) A method as set forth in claim 1 wherein the flexible articulate tubular device further comprises a plurality of wires attached to the plurality of pivot rings and connected to the articulation drive device for applying a tensile force to one or more of the plurality of pivot rings.

25. (New) A method as set forth in claim 1 wherein the flexible articulate tubular device further comprises a position drive device and further comprising communicating motion control commands from the motion controller to the position control device to articulate said flexible articulate tubular device.

26. (New) A method as set forth in claim 1 wherein each one of the plurality of pivot rings comprises two opposing undulating surfaces forming two protruding portions formed at 180 degrees from each other on each of the axial sides of each pivot ring such that mating sides of adjacent pivot rings are in direct contact.